

CLAIMS

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2     The invention claimed is:

3     1.     A multi-terminal electrical safety switch for simultaneously closing  
4             or simultaneously opening electrical circuits connected thereto,  
5             comprising:

6             a)     a terminal block; and

7             b)     a current path completer/breaker;

8             wherein said terminal block is for having the electrical circuit  
9             connected thereto;

10            wherein said current path completer/breaker is replaceably engaged  
11            with said terminal block;

12            wherein said current path completer/breaker simultaneously completes  
13            current paths through said terminal block when engaged with said  
14            terminal block and thereby simultaneously closes the electrical  
15            circuits connected to said terminal block; and

16            wherein said current path completer/breaker simultaneously breaks  
17            the current paths through said terminal block when removed from said  
18            terminal block and thereby simultaneously opens the electrical  
19            circuits connected to said terminal block so as to allow the  
20            electrical circuits connected to said terminal block to be safely  
21            worked on without any inadvertent closing of any of the electrical  
22            circuits by virtue of said current path completer/breaker being  
23            physically removed from said terminal block.

24     2.     The switch as defined in claim 1; further comprising an insulative  
25             block;

26             wherein said insulative block replaceably attaches to said terminal  
27             block; and

28             wherein said insulative block is replaceably engaged by said current  
29             path completer/breaker.

- 1     3.     The switch as defined in claim 1, wherein said terminal block is  
2           generally rectangular-parallelepiped-shaped.
- 3     4.     The switch as defined in claim 2, wherein said terminal block has  
4           at least one pair of terminals;  
5           wherein each pair of terminals of said at least one pair of  
6           terminals of said terminal block are transversely aligned with each  
7           other; and  
8           wherein each pair of terminals of said at least one pair of  
9           terminals of said terminal block is associated with a current path  
10          of the at least one current path.
- 11    5.     The switch as defined in claim 4, wherein said terminal block has  
12          a top surface;  
13          wherein said terminal block has a pair of side edges;  
14          wherein said at least pair of terminals of said terminal block is  
15          disposed on said top surface of said terminal block; and  
16          wherein each terminal of said at least one pair of terminals is  
17          disposed at an associated side edge of said pair of side edges of  
18          said terminal block.
- 19    6.     The switch as defined in claim 4, wherein said terminal block has  
20          at least one socket; and  
21          wherein said at least one socket electrically communicates a pair  
22          of terminals of said at least one pair of terminals of said terminal  
23          block with each other when said current path completer/breaker is  
24          replaceably engaged with said terminal block thereby completing a  
25          current path of the at least one current path associated therewith.
- 26    7.     The switch as defined in claim 6, wherein said terminal block has  
27          a top surface; and

1 wherein said at least one socket is disposed on said top surface of  
2 said terminal block.

3 8. The switch as defined in claim 6, wherein each socket of said at  
4 least one socket in said terminal block comprises a pair of strips;  
5 and  
6 wherein said pair of strips of each socket of said at least one  
7 socket in said terminal block are transversely aligned with each  
8 other.

9 9. The switch as defined in claim 8, wherein each strip of said pair  
10 of strips of said at least one socket of said terminal block is  
11 electrically conductive;  
12 wherein each strip of said pair of strips of said at least one  
13 socket of said terminal block is bendable; and  
14 wherein each strip of said pair of strips of said at least one  
15 socket of said terminal block is resilient.

16 10. The switch as defined in claim 8, wherein each strip of said pair  
17 of strips of said at least one socket of said terminal block has a  
18 flat portion;  
19 wherein each strip of said pair of strips of said at least one  
20 socket of said terminal block has a substantially U-shaped portion;  
21 and  
22 wherein said substantially U-shaped portion of each strip of said  
23 pair of strips of said at least one socket of said terminal block  
24 extends from said flat portion of an associated strip of said pair  
25 of strips of said at least one socket of said terminal block.

26 11. The switch as defined in claim 10, wherein said flat portion of each  
27 strip of said pair of strips of said at least one socket of said  
28 terminal block is electrically communicatively attached to an

- 1 associated terminal of said at least one pair of terminals of said  
2 terminal block; and  
3 wherein said substantially U-shaped portion of each strip of said  
4 pair of strips of said at least one socket of said terminal block  
5 depends into said terminal block.
- 6 12. The switch as defined in claim 8, wherein said terminal block has  
7 a primary partition; and  
8 wherein said primary partition of said terminal block separates said  
9 pair of strips of each socket of said at least one socket of said  
10 terminal block from each other.
- 11 13. The switch as defined in claim 12, wherein said terminal block has  
12 a longitudinal center line; and  
13 wherein said primary partition of said terminal block extends along  
14 said longitudinal centerline of said terminal block.
- 15 14. The switch as defined in claim 12, wherein said terminal block has  
16 at least one secondary partition; and  
17 wherein each secondary partition of said at least one secondary  
18 partition of said terminal block separates adjacent terminals of  
19 said at least one pair of terminals of said terminal block from each  
20 other.
- 21 15. The switch as defined in claim 14, wherein each secondary partition  
22 of said at least one secondary partition of said terminal block  
23 intersects said primary partition of said terminal block; and  
24 wherein each secondary partition of said at least one secondary  
25 partition of said terminal block terminal block extends from one  
26 side edge of said pair of side edges of said terminal block to the  
27 other side edge of said pair of side edges of said terminal block.

- 1 16. The switch as defined in claim 2, wherein said insulative block is  
2 substantially rectangular-parallelepiped-shaped.
- 3 17. The switch as defined in claim 6, wherein insulative block  
4 insulatively protects said at least one socket of said terminal  
5 block when attached to said terminal block; and  
6 wherein insulative block insulatively protects said current path  
7 completer/breaker when said current path completer/breaker is  
8 engaged therewith.
- 9 18. The switch as defined in claim 14, wherein insulative block has a  
10 first recess;  
11 wherein said first recess in said insulative block is defined by a  
12 floor; and  
13 wherein said first recess in said insulative block replaceably  
14 receives said current path completer/breaker.
- 15 19. The switch as defined in claim 18, wherein said insulative block has  
16 a top surface; and  
17 wherein said first recess in said insulative block depends in said  
18 top surface of said insulative block.
- 19 20. The switch as defined in claim 18, wherein said insulative block has  
20 a second recess;  
21 wherein said second recess in said insulative block is defined by  
22 a ceiling; and  
23 wherein said second recess in said insulative block replaceably  
24 receives said primary partition of said terminal block.
- 25 21. The switch as defined in claim 20, wherein said insulative block has  
26 a bottom surface; and

1            wherein said second recess in said insulative block extends in said  
2            bottom surface of said insulative block.

3        22.    The switch as defined in claim 20, wherein said floor of said first  
4            recess in said insulative block and said ceiling of said second  
5            recess in said insulative block form a partition in said insulative  
6            block.

7        23.    The switch as defined in claim 22, wherein said partition in  
8            insulative block has at least one pair of through slots;  
9            wherein each pair of through slots of said at least one pair of  
10          through slots in said partition in insulative block are transversely  
11          aligned with each other; and  
12          wherein each pair of through slot of said at least one pair of  
13          through slots in said partition in said insulative block aligns with  
14          an associated socket of said at least one socket of said terminal  
15          block.

16       24.    The switch as defined in claim 20, wherein said second recess in  
17            said insulative block is defined by a pair of side walls.

18       25.    The switch as defined in claim 24, wherein said pair of side walls  
19            of said insulative block has at least one pair of through slots when  
20            said at least one secondary partition of said terminal block is  
21            present;  
22            wherein each pair of through slots of said at least one pair of  
23            through slots in said pair of side walls of said insulative block  
24            are transversely aligned with each other; and  
25            wherein said at least one pair of through slots in said pair of side  
26            walls of said insulative block receive an associated secondary  
27            partition of said at least one secondary partition of said terminal  
28            block.

- 1 26. The switch as defined in claim 1, wherein said current path  
2 completer/breaker is generally rectangular-parallelepiped-shaped.
- 3 27. The switch as defined in claim 1, wherein said current path  
4 completer/breaker has a handle.
- 5 28. The switch as defined in claim 27, wherein said current path  
6 completer/breaker has a top surface; and  
7 wherein said handle of said current path completer/breaker extends  
8 upwardly from said top surface of said current path  
9 completer/breaker.
- 10 29. The switch as defined in claim 27, wherein said handle of said  
11 current path completer/breaker is generally T-shaped; and  
12 wherein said T-shape of said current path completer/breaker  
13 facilitates gripping of said current path completer/breaker when  
14 said current path completer/breaker is being disengaged from said  
15 insulative block and said terminal block.
- 16 30. The switch as defined in claim 23, wherein said current path  
17 completer/breaker has at least one fork; and  
18 wherein each fork of said at least one fork of said current path  
19 completer/breaker is two pronged.
- 20 31. The switch as defined in claim 30, wherein each fork of said at  
21 least one fork of said current path completer/breaker is  
22 electrically conductive.
- 23 32. The switch as defined in claim 30, wherein said at least one fork  
24 of said current path completer/breaker depends from said current  
25 path completer/breaker.

- 1 33. The switch as defined in claim 30, wherein said current path  
2 completer/breaker has a bottom surface; and  
3 wherein said at least one fork of said current path  
4 completer/breaker depends from said bottom surface of said current  
5 path completer/breaker.
- 6 34. The switch as defined in claim 30, wherein each fork of said at  
7 least one fork of said current path completer/breaker is  
8 substantially inverted U-shaped.
- 9 35. The switch as defined in claim 30, wherein each fork of said at  
10 least one fork of said current path completer/breaker passes through  
11 an associated pair of through slots of said at least one pair of  
12 through slots in said partition in said insulative block and  
13 engagingly into an associated socket of said at least one socket of  
14 said terminal block when said current path completer/breaker is  
15 engaged in said insulative block, and in so doing, simultaneously  
16 completes the current paths through said terminal block and thereby  
17 simultaneously closes the electrical circuits connected to said  
18 terminal block and when each fork of said at least one fork of said  
19 current path completer/breaker is disengaged from said associated  
20 socket of said at least one socket of said terminal block and  
21 removed from said associated pair of through slots of said at least  
22 one pair of through slots in said partition in said insulative block  
23 by said current path completer/breaker being disengaged from said  
24 insulative block the current paths through said terminal block are  
25 simultaneously broken and thereby the electrical circuits connected  
26 to said terminal block are simultaneously opened.